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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/712,012

11/14/2003

Yoichi Sato

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07/25/2008

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EXAMINER

DURNFORD GESZVAIN, DILLON

ART UNIT

PAPER NUMBER

2622

MAIL DATE

DELIVERY MODE

07/25/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/712,012	Applicant(s) SATO, YOICHI	
	Examiner Dillon Durnford-Geszvain	Art Unit 2622	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 April 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 11-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 11-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. Claims **11-13** are pending, claim **13** is amended, and claims **1-10** are cancelled.

Response to Arguments

2. Applicant's arguments filed 4/11/2008 have been fully considered but they are not persuasive. The Applicant argues that Tariki does not disclose or suggest the claimed invention. The Applicant states what they believe Tariki teaches, but does not state what distinguishes what is taught in Tariki from the presently claimed invention. The Applicant's argument is that Tariki merely discloses the updating of correction data in a memory and the correction of an image signal. Even assuming that the Examiner would agree with the Applicant's characterization of the reference, the Examiner does not believe that the reference as described by the Applicant does not teach the claimed invention.

Applicant's arguments fail to comply with 37 CFR 1.111(b) because they amount to a general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the references. Therefore, the rejection will be maintained.

3. The Applicant has amended claim **13** but has not stated whether these amendments render the claim allowable over the prior art or if the amendments were made to overcome the objection to the claim raised in the previous Office Action. As the

Applicant has made the change suggested in the previous Office Action (See section 4 in the Office Action mailed 1/11/2008), the Examiner will assume that the later.

Claim Rejections - 35 USC § 102

4. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

5. Claim **11** and **13** are rejected under 35 U.S.C. 102(b) as being anticipated by US 2002/0008766 (Tariki).

As to claim **11**, Tariki teaches an imaging apparatus comprising:

a photoelectric conversion area 5 (see Fig. 1) including a plurality of photoelectric converters (inherent in a CCD);

a controller 18 configured to control a first mode (from t1) for continuously reading out, from the photoelectric conversion area 5, a plurality of image data (see Fig. 4, where IMAGE SIGNAL is the image data) acquired by a plurality of image-taking operations performed at a plurality of accumulation times (see Fig. 4 and note that the accumulation times happen to be the same), respectively, and a second mode (from t0 to t1) for continuously reading out, from the photoelectric conversion area, a plurality of correction data (DARK CURRENT NOISE COMPONENT), having the same duration as the plurality of charge accumulation times (see Fig. 4 and note that although only a single dark frame is shown, if SW1 is held down for longer, more dark frames are captured, see Fig. 3 and [0110] lines 6-14), respectively, in a state where the photoelectric conversion area is shielded by a shutter (see [0106]); and

an image processor 14 for correcting the plurality of image data by using the plurality of correction data ([0064]).

6. As to claim **13**, see the rejection of claim **11** and note that Tariki further teaches an imaging apparatus according to claim **11**, wherein the second mode acquires, in the same order as used to acquire the plurality of image data in the first mode, the plurality of correction data at different times than the plurality of charge accumulation times (note that since there is only one duration for the image data, and the dark data duration is the same it is captured in the same order, also see Fig. 4), and

wherein in a case where a plurality of image data are acquired at a plurality of charge accumulation times having a same duration in the first mode (as is the case in Tariki, see Fig. 4), the controller acquires correction data to be used to correct the plurality of image data acquired at the plurality of charge accumulating times having the same duration during a plurality of charge accumulating times having the same duration in the second mode (see Fig. 4 and note that although only a single dark frame is shown, if SW1 is held down for longer, more dark frames are captured, see Fig. 3 and [0110] lines 6-14).

Claim Rejections - 35 USC § 103

7. Claim **12** is rejected under 35 U.S.C. 103(a) as being unpatentable over US 2002/0008766 (Tariki) in view of US 6,101,287 (Corum).

As to claim **12**, Tariki does not teach that the photoelectric conversion area

includes an optical black area covered with a shield, and the image processor corrects the image data on the basis of optical black data every time the plurality of image data is acquired in the first mode, and then corrects the image data corrected with the optical black pixels with the correction data.

However, Corum teaches an imager with an optical black area (shown shaded in Fig. 3) and that the data from the optical black area is used in conjunction with dark frame data to correct an image (Column 3 lines 11-18).

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to have used an optical black area as taught by Corum to correct the image data as acquired by Tariki as this would result in even better image quality than subtracting a dark frame alone would.

Conclusion

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dillon Durnford-Geszvain whose telephone number is (571)272-2829. The examiner can normally be reached on Monday through Friday 8 am to 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Ometz can be reached on (571) 272-7593. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/David L. Ometz/

Supervisory Patent Examiner, Art Unit 2622

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